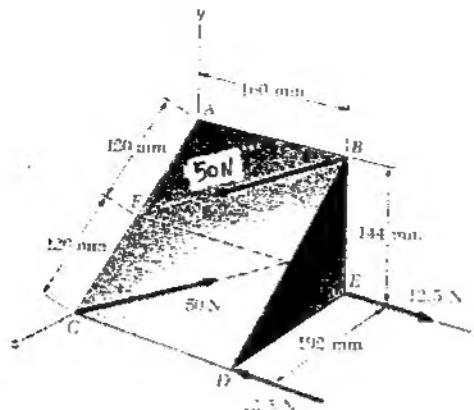
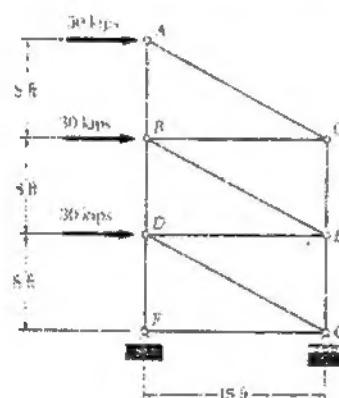


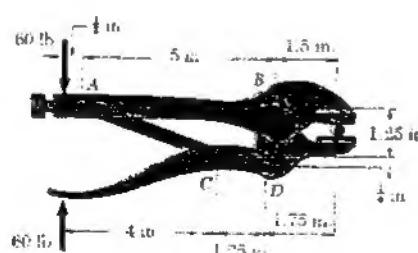
1. (25pts) Replace the two couples shown by a single equivalent couple, specifying its magnitude and the direction of its axis.



2. (25pts) Determine the force in members BD and DE of the truss shown.



3. (25pts) Determine the magnitude of the gripping forces when two 60-lb forces are applied as shown.



4. (25pts) Determine the moment of inertia of the shaded area shown with respect to the x-axis.

